Monday, July 13, 1998 3:30-6:00 p.m. Milwaukee Hilton Hotel, Milwaukee, WI

Topic Group Meeting Participants were:

Ira Baldwin, NCSTS	Daren Gilbert, State Rail Sfty. Program
Jim Baranski, NY SEMO	Steve Hamp, DOE-NTP
Kevin Blackwell, FRA	Rick Hand, IL Commerce Commission
Mike Butler, UETC	Swenam Lee, DOE-FETC
Mike Calhoun, FRA	Norm Lindgren, UDOT
Sandra Covi, UPRR	Bruce Mibeck, FRA
J.C. De La Garza, DOE-YMSCO	William Naughton, ComEd
Ray English, DOE-NR	Markus Popa, DOE-OCRWM
Allan Fisher, Conrail	Bill Sherman, NE HLRW Task Force
Bob Fronczak, AAR	Carlisle Smith, Pub. Utilities Comm. of OH
Phil Gehner, TRW-YMP	Thor Strong, Michigan DEQ/MOCSG
Michael Giblin, DOE-NV	Jim Williams, Planning Information Corp.

The meeting convened at approximately 3:35 p.m. CDT. Mike Butler (UETC) welcomed participants, distributed a meeting agenda, and introduced himself as the facilitator for the Rail Topic Group. He informed participants that copies of the Rail Topic Group Issues Timeline and the WGA WIPP Transportation Safety Program Implementation Guide were available. Participants then introduced themselves, after which the Group moved to consider the first item of business on the agenda, the release of the rail matrices to the TEC/WG.

Mr. Butler offered a brief discussion of the matrices to new participants, explaining that they came out of a request by the TEC/WG membership for more specific information pertaining to rail transport. He then confirmed with the Group that they were ready to release the matrices to the TEC/WG at the opening of the meeting the following day. There were no dissenting remarks among participants. Mr. Butler added that the matrices would be released with the explanatory cover sheet drafted by the Group in April, which explains that they are intended as "living documents" subject to periodic review. In this vein, Mr. Butler said, the newly constituted Tribal Issues Topic Group would be reviewing and commenting on the Tribal Applicability column of the regulatory summary matrix and returning said comments to the Rail Group at an unspecified future time. There were no comments on the release of the matrices nor on the suggested

approach for doing so. Mr. Butler then moved on to the second item of business, the Rail Topic Group "Issues Timeline."

He mentioned that the Group had completed this timeline at the suggestion of some participants as a way to measure the Group's progress on the seven original items which were tasked to it upon its formation. He pointed out to Group members that each of these items has been addressed, and asked members to discuss the Group's future. Kevin Blackwell (FRA) noted that in his opinion the Group has met its expressly defined goal of providing more information to TEC/WG members on rail safety and operations, which might make it seem logical to disband. Other regular Group participants concurred with this statement. The general consensus of the Group was that it should complete its current activities (WIPP-PIG review) and dissolve; participants agreed that it would attempt to do so within the next year. One participant commented that in actuality the idea for the current WIPP-PIG effort was raised internally within the Group, rather than by the TEC/WG membership, which runs counter to the Topic Group process and seems to indicate that the Group is running out of items to consider. Mr. Butler said that an abbreviated version of this timeline would be presented to the TEC/WG the following day, as a means of informing TEC/WG members as to the progress of the Group.

The third item of business on the agenda was the planned review of the WIPP Transportation Safety Program Planning Implementation Guide ("WIPP-PIG") and preparation of a "companion piece" pertaining to rail-specific issues. Mr. Butler explained that this idea was first suggested by a Topic Group participant just before the Las Vegas meeting in January 1998, but was tabled pending completion and release of the matrices. He suggested that the Group discuss the WIPP-PIG document subject by subject, following the format used in order to maintain consistency in approach, and outline major items for inclusion in the rail "companion. This suggestion was seconded by Markus Popa (DOE-OCRWM) and others.

The first section examined was Section 1: "High Quality Drivers & Carrier Compliance." There was some initial discussion by Allan Fisher (Conrail) and others regarding the term "High Quality" and its lack of specificity. Mr. Fisher said that it was important for the Group to note the detail and comprehensiveness of the rail regulatory regime and industry standards and practices pertaining to training and inspection in order to avoid a similar subjectivity. Mr. Butler remarked that the inspections comparison matrix could assist in that regard. Bob Fronczak (AAR) noted that unlike highway shipments of radioactive materials, the vast majority of shipments by rail are handled by multiple carriers. Train crews from each carrier generally only operate on their own railroad's lines. Crew members get qualified on certain sections of track. One highly positive impact is that train crews become very familiar with region-specific conditions given that they cover the same track in the same parts of the country on a regular basis. Bill Sherman (NE HLRW Task Force) concurred with this statement, remarking that truck drivers often cover vast distances in short periods of time and frequently travel new and unfamiliar regions and roads. William Naughton (ComEd) noted that the frequent stopping and crew changes required by multiple carrier arrangements provide more opportunities for crew changes and hence more well-rested operators than might be the case with truck hauling. Ray English (DOE-NR) added that the biggest contributor to the inherent safety of the rail mode is the closed character of the rail system. Mr. English said that it was important for the Group to acknowledge the economic incentives at work; namely, that the industry stands to lose significant amounts of revenue even

from minor incidents that will by definition stop the flow of cargo in a closed system. As a result, he said, rail carriers have no option but to take all necessary measures to minimize the potential for incident. Mr. Fisher added that it is also imperative for any rail carrier not to betray the public trust, noting that as private companies, they also face the added financial implications of falling stock prices and lowered consumer confidence.

Mr. Blackwell suggested the Group take a look at the spectrum of federal regulations pertaining specifically to the preparedness and "high quality" of train crews. Participants again cited the inspections comparison matrix as a point of reference. Bruce Mibeck (FRA) provided the Group with a brief description of the FRA's recurrent and function-specific training for all rail personnel. He noted that FRA regulations mandate recurrent training at a minimum interval of 3 years, but in cases of changed or redefined job functions or new employees training occurs at more frequent intervals. Mr. Mibeck also informed the Group that FRA regulations require that all employees receive specific training directly tailored to job function. Mr. Blackwell remarked that the Group should stress that these regulations, although highly detailed, are meant to (and do) serve as a baseline set of requirements, and that carriers should (and do) institute measures to meet and exceed them. He also said that in his review of the WIPP-PIG document, he did not notice any extra-regulatory requirements to parallel that which has been instituted through rail industry recommended standards and practices. Mr. Sherman and others agreed that the document did not appear extra-regulatory in focus.

Mr. Jim Williams (Planning Information Corporation) commented that he was of the opinion the Group may be ignoring the complex planning and coordination efforts which led to the creation of the WIPP-PIG document and which has been typical in all preparations for the WIPP campaign to date. He stressed that the Group should consider taking a step back and analyzing the context in which this document was crafted, and structure its approach to drafting a companion accordingly. Discussion ensued, and several participants expressed concern with this suggestion; Mr. Butler summarized these concerns by relating to Mr. Williams the purpose of the Topic Group process generally and the focus of the Rail Topic Group in particular. He noted that the Topic Groups are intended to be distinctly circumscribed in their approach and focus, adding that the Rail Topic Group was formed solely to provide information to the TEC/WG on operational matters specific to rail transport. For this reason, Mr. Butler said, issues such as campaign planning are out of the Group's purview and in any case, may not coincide with the expertise of Group members. Mr. Williams said that he could understand this rationale to restrict the Group's work on a companion to the WIPP-PIG document to operational considerations, but requested that Mr. Butler note his recommendation.

Mr. Butler then summarized his interpretation of the three main elements of the Group's discussion on this section:

- training and preparedness needs and requirements for rail crews are distinctly different from that of truck drivers, and are driven by the unique (i.e., closed) nature of the rail system and rail operations;

- the differences inherent in the rail system as opposed to the highway system provide economic and other incentives for the rail industry to employ innovative technical and policy measures aimed at enhancing safety through better trained and prepared personnel; and

- the FRA and federal regulations pertaining to the training and preparedness of rail crews essentially serve a stewardship role, providing baseline guidance and oversight while recognizing the need not to limit industry safety standards and practices.

The Group then turned to Section 2: "Independent Inspections." Mr. Mibeck again offered an explanation of the relevant regulations pertaining to inspection. He pointed out that the FRA requires pre-departure and 1000-mile inspections on all rail equipment. Several Group members referred to the Topic Group's matrices as excellent resources describing the regulatory regime concerning inspection. Mr. Mibeck also pointed out several extra-regulatory measures common to the industry, including the addition of defect detectors. Defect detectors include items such as hot box detectors, dragging equipment detectors and slide fences, which are spaced periodically along the right of way to detect overheated wheel bearings, dragging rail equipment, and rock slides respectively. Whenever a defect detector is triggered, Mr. Mibeck noted, employees immediately conduct inspections. This is also true for routine stops, he added.

Discussion then moved to the issue of how the Group should distinguish between equipment and cargo inspection. Mr. English noted that radiation levels on or near the cargo would not change to any significant degree without the occurrence of a major incident, a fact which minimizes the need for repeated inspection and surveillance. Sandy Covi (UPRR) and other industry representatives agreed with this statement, but noted that states will nevertheless continue to demand a significant role in inspection and will seek assurances as to the safety and stability of the cargo. Carlisle Smith (Public Utilities Commission of Ohio) and several other state representatives on hand reinforced this position, agreeing that while the radiation levels certified by the shipper are unlikely to change, states should still have the right to board and inspect shipments at stopping points for public health and safety reasons. Mr. English remarked that the underlying factor in the states' position is public perception, not necessarily public safety. Mr. Blackwell noted that this was exactly the issue that spurred the FRA to develop its state participation program. Mike Calhoun (FRA) explained some of the main tenets of this program to new participants. He said that the program is a significant vehicle for states to regulate through inspection of hazardous cargo, as states can participate and even impose a more stringent standard if the following conditions are met: such a standard is necessary to reduce a local hazard; inspection does not impose a burden on interstate commerce; and it does not contradict federal laws. The FRA no longer offers a 50/50 grant program, but does provide on-the-job training to inspectors, coordinates direct inspection, and avoids duplication by monitoring state activities. Most of the participants were familiar with the program, and the Group generally endorsed its approach.

Mr. English and Mr. Fisher both noted the importance of the interstate commerce argument, agreeing that the "48 hour rule" to keep freight moving was a good one. Rail industry representatives also raised the issue of the soon-to-be released FRA SCOP, a policy which among other things will direct FRA personnel to inspect shipments at all stops, within manpower limits. Mr. Blackwell opined that even when released, this policy will serve to compliment rather

than supplant the joint inspection arrangement with participating states as formulated in the state participation program. He also offered that, similar to the "quality crew" section, nothing in FRA regulations prevents carriers from conducting additional or enhanced inspections on equipment, which they frequently do. Nevertheless, the Group did agree to consider and possibly include the SCOP in the WIPP companion document upon its official release.

Mr. Sherman then returned to the initial point of distinguishing between inspection of cargo and inspection of equipment. He cited Mr. Mibeck's earlier description of the regulatory requirements for inspection of various equipment and infrastructure, and suggested that perhaps the Group should split its work on Section 2 into two parts, one treating issues of inspection related to cargo, and the second focusing on equipment and infrastructure. Given that regulations as well as industry standards considered each at some length, Mr. Butler concurred with Mr. Sherman on this point.

Mr. Butler attempted to summarize the discussion of the Group on Section 2 as follows:

- regulations of significant scope and detail pertaining to inspections serve as effective "baselines" for the industry to meet or exceed;
- inspection practices and policies related to radioactive cargo are different in form and scope from inspection practices related to equipment, and should be treated accordingly;
- the Group recognizes the need for a state role in inspection of cargo and equipment, and endorses a joint participatory inspection process for both which includes the FRA, states, and carriers; and
- the unimpeded flow of interstate cargo is critical to the successful functioning of a closed rail system and should not be unduly impaired by joint inspection.

The Group then discussed Section 3: "Bad Weather & Road Conditions." Mr. Fronczak and Mr. Fisher described for the Group some of the federal regulations and industry policies and guidelines followed by carriers related to inclement weather and track conditions. Regulations discussed included federal track and signal inspection standards, grade crossing inspection, and implementation of warning devices; industry guidelines include bridge inspections by carriers, and the promulgation of bad weather policies by carriers. One participant pointed out the major difference between highway and rail concerning weather conditions is the fact that railcars for the most part do not stop for weather related reasons. Mr. Fisher agreed with this statement on principle, but said that to his knowledge every carrier has a bad weather policy in place. Some common elements of these policies include: high water provisions; contract agreements with the National Weather Service; and the use of appropriate rail anchors to preclude "sun kinks" in welded rail in extremely hot weather, and pull-a-parts in cold weather. Mr. Fisher noted the importance of hot weather guidelines for rail and remarked that there is nothing comparable to them for the highway mode.

Mr. Mibeck pointed out that another major difference between rail and highway transport is that snow—even in significant amounts—does not pose the same problem for trains as it does for trucks. He added that ice is far more likely to cause a stoppage of rail cars. Mr. Mibeck noted that railroads employ technologies such as drying systems in the airbrakes (to prevent the build up of moisture in the brake system) and switch heaters, which are used in cold climates to prevent switches from freezing and becoming inoperable. Mr. Fronczak noted that bad weather

policies usually contain alternate routes for impassable conditions such as the severe icing Mr. Mibeck described. He also noted that carriers have systems in place to monitor the location of railcars at any point on the track, which allows the carrier to make informed decisions to avoid or minimize potential weather-related risks.

The final section considered by the Group was Section 4: "Safe Parking During Abnormal Conditions." Mr. Blackwell began the discussion by commenting that in the event of an incapacitating incident, the decision would be made on-site as to where to locate the railcars, with a DOE facility being the most preferable, and other federal facilities a secondary option. Mr. Fronczak noted that in such a situation, carriers would normally be willing to consult with states as to location decisions if said consultation were not to cause unnecessary delay in managing the incident. He added that state notification would likely come directly from the shipper, in this case the Department. Jim Baranski (NY State Emergency Management Office) remarked that states generally prefer direct communication with DOE (as the shipper of record) in the event of an incident. Mr. Mibeck said that 49 CFR stipulates that hazardous materials must be forwarded from the "safe haven" within 48 hours, a limit adopted essentially to avoid problems during holdover and to keep the flow of interstate cargo moving. He added that the holdover period is marked by the continual monitoring of cargo, to ensure that there is no undue health hazard caused by the interruption in shipping.

A question was raised concerning the loss or separation of a railcar containing radioactive cargo. Mr. Blackwell noted the industry's adoption of Automatic Equipment Identification (AIE) systems, which are electronic scanning devices used in conjunction with AEI tags on all railcars. This allows the carrier to locate any railcar in the system at any time; accordingly, by knowing the location of the car where it passed the last AEI reader, the car can be easily pinpointed.

Mr. Butler then informed the Group that its remaining time was limited and that he wished to defer further discussion (if any) of Section 4 and the remaining sections of the WIPP document to subsequent conference calls and face-to-face meetings. He requested a volunteer to report on the Group's progress in the following morning's Topic Group Reports plenary session. Mr. Fisher volunteered to do so, with Mr. Butler's assistance. The Group discussed a timetable for preparation of the WIPP-PIG rail companion and agreed to attempt to prepare a draft document for the January 1999 TEC/WG meeting.

Mr. Butler thanked all participants for their input and effort, and the meeting adjourned at approximately 5:55 p.m. CDT.